Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended): A multicarrier communication system, comprising:
        a processor having an Orthogonal Frequency-Division Multiplexing (OFDM) transceiver operative to use channel knowledge to dynamically select and puncture one or more subcarriers for a packet prior to transmission, and channel delay spread knowledge that is used to dynamically adjust a guard interval of a the packet prior to transmission;
        wherein the OFDM transceiver is operative to receive a guard interval from a target node and the source node then uses that guard interval for subsequent transmissions to the target node; and
        wherein the source node is programmed to revert back to a previous baseline guard interval that was negotiated with all nodes associated with the source node.

2.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to adjust the guard interval by appending a cyclic prefix to the packet that dynamically changes with updated channel delay spread knowledge.

3.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to adjust the guard interval by appending a cyclic suffix to the packet that dynamically changes with updated channel delay spread knowledge.

4.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to adjust the guard interval by appending both a cyclic prefix and a cyclic suffix to the packet that dynamically changes with updated channel delay spread

5.   (Original): The system of claim 1 wherein the multicarrier communication system is an Orthogonal Frequency-Division Multiplexing (OFDM) communication system.

6.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to determine the guard interval from a source transmission to set the guard interval.

7.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to determine the guard interval from a target transmission to set the guard interval.

8.   (Previously Presented): The system of claim 1 wherein the OFDM transceiver is operative to receive measured multipath reflections to provide channel delay spread knowledge to set the guard interval and remove Inter-Symbol Interference (ISI).

9.   (Previously Presented): The system of claim 1 wherein the multicarrier communication system is a Time Division Duplex (TDD) OFDM communication system that includes a source node with the OFDM transceiver, the source node to inform other nodes in the system of the guard interval that is to be commonly used.

10.   (Previously Presented):   The system of claim 9, wherein the OFDM transceiver is operative to set the guard intervals following a transmission from the source node to a target node and back again to the source node.

11.   (Previously Presented): The system of claim 9 wherein the OFDM transceiver is operative to receive guard interval information from one or more associated nodes, and once received, the source node determines the appropriate guard interval and informs the nodes of the guard interval to be used.

12.   (Canceled)

13.   (Canceled)

14.   (Currently Amended): A communication system having Orthogonal Frequency-Division Multiplexing (OFDM) devices, a first OFDM device comprising:

        an analog transceiver having a receiver chain to demodulate a packet;

a processor coupled to the receiver chain, the processor having an OFDM transceiver operative to receive the packet and use channel knowledge to dynamically select and puncture one or more subcarriers for a packet prior to transmission, to ~~and use channel delay spread knowledge~~ to adjust a guard interval of the packet prior to transmission based on a guard interval received from a target node, and to revert back to a baseline guard band interval that was negotiated with all nodes associated with the transceiver; and

a Static Random Access Memory (SRAM) memory coupled to the processor.

15.   (Original): The communications system of claim 14 wherein the OFDM transceiver is operative to periodically receive channel delay spread knowledge updates and dynamically change the guard interval for further transmissions.

16.   (Original): The communications system of claim 14 further including:

other OFDM devices to transmit guard interval information to the first OFDM device, the first OFDM device to use the OFDM transceiver to determine a guard interval, and transmit the guard interval using the analog transceiver to the other OFDM devices.

17.   (Currently Amended): A method comprising:

measuring channel delays from multipath reflections in an Orthogonal Frequency-Division Multiplexing (OFDM) system to form channel knowledge and recurrent channel delay spread knowledge;

using the channel knowledge to dynamically select and puncture one or more subcarriers for a packet prior to transmission; and

adjusting a guard interval of the packet prior to transmission based on a guard interval received from a target node ~~using the recurrent channel delay spread knowledge to reduce Inter-Symbol Interference (ISI)~~; and

reverting back to a previous baseline guard interval.

18.   (Previously Presented): The method of claim 17, further including:

transmitting the recurrent channel delay spread knowledge to inform other nodes in the system of the guard interval that is to be commonly used.

19.   (Canceled)